

THE MEDICAL NEWS AND LIBRARY.

VOL. XXXVI.

SEPTEMBER, 1878.

No. 429.

CONTENTS.

CLINICAL LECTURES.

- A Clinical Lecture on a Case of Ovarian Tumour. By William Goodell, A.M., M.D., Professor of Clinical Gynecology in the University of Pennsylvania . . . 141

HOSPITAL NOTES AND GLEANINGS.

- Cases of Primary and Secondary Sclerosis of the Spinal Cord . . . 146
Resection of Knee-Joint; Recovery, with Useful Limb . . . 148

MEDICAL NEWS.

- Domestic Intelligence—Yellow Fever and its Prevention . . . 150

- The Progress of Yellow Fever Epidemic . . 151
American Ophthalmological Society . . 151
American Otological Society . . 152
Oregon State Medical Society . . 152
Medical Degrees for Dental Students . . 152

- Foreign Intelligence—Catgut Ligature . . 152
Thrombosis of the Veins in its Surgical Relations . . 153
Epidermic Grafting in Coloured Races . . 153
The Brain in Atrophy of the Arm . . 153
Pulverized Sea-Water . . 153
Metallo-Therapeutics . . 154
Canada Medical Association . . 155
Obituary Record . . 155

CHARCOT ON DISEASES OF THE NERVOUS SYSTEM . . . 16 PAGES.

CLINICAL LECTURES.

A CLINICAL LECTURE ON A CASE OF OVARIAN TUMOUR.

By WILLIAM GOODELL, A.M., M.D.,
Professor of Clinical Gynecology in the
University of Pennsylvania.

TO-DAY I bring before you this woman, to show you how to make an examination for a suspected ovarian cyst, and how to distinguish such a cyst from other tumours and other fluid collections in the abdominal cavity. Her history is as follows:—

Eight months ago she discovered a tumour in her belly, which has steadily increased in size, until, as you can plainly see, she is much hampered by its bulk.

She has come to get us to tell her what it is, and what she shall do. Now the first thing that I shall do is to pass the catheter, so as to be sure that no over-distended bladder will obscure the diagnosis. Very little urine comes away. The fear of this examination has had the same effect on her as examination-day will have on some of you. Palpation now, I find, yields a sense of fluctuation but obscured by the fat-laden wall of the abdomen, which, like that of our childhood's patron saint, shakes "like a bowlful of jelly." To muffle this fat-thrill I ask one of my assistants to lay the ulnar edge of his hand along the linea alba. The pressure of the hand will act precisely like the damper-wedge of the piano-tuner, which muffles the sound of one string while its fellow is being tuned.

Published Monthly by HENRY C. LEA, Nos. 706 & 708 Sansom Street, Philadelphia, for One Dollar a year; also, furnished GRATUITOUSLY to all subscribers of the "American Journal of the Medical Sciences," who remit the Annual Subscription, Five Dollars, in advance, in which case both periodicals are sent by mail free of postage.

In no case is this periodical sent unless the subscription is paid in advance.

VOL. XXXVI.—9

By this means I distinctly get the wave-tap of a fluid, and am able unhesitatingly to say that there is a liquid collection in the abdominal cavity. But what kind of a fluid is it? free or encysted?

If it were free, like that of ascites, while the woman lies on her back, the intestines should float up to the surface, and the fluid should gravitate to the flanks, making them bulge. But listen, and you will see that this is not the case, for the upper surface of the tumour gives a dull sound, while from each flank I elicit a clear percussion note unchanged by any position. Now this means a confined collection of fluid, and most probably a cyst. Can it be ovarian? or is it uterine? May it not be pregnancy?

The question of pregnancy is a very serious one, because it is sometimes a most difficult one to decide. One of the best surgeons of his day drove a trocar into the shoulder of a fœtus, under the idea that he was tapping a case of simple dropsy. Now this woman is under forty and sees her monthlies regularly; in fact, she saw them last week. This does not look much like pregnancy. Yet in making a diagnosis we must never take anything for granted. It is by doing so that we get into trouble. She may be wilfully deceiving us in the hopes of having a cheap abortion induced by the examination. She may be pregnant and yet menstruate. But, if pregnant, she must from her size be eight months gone, and yet the ordinary signs of pregnancy are absent. Even her breasts are withered up, and give out no milk on being squeezed. I cannot discover any fœtal heart-sounds, or fœtal movements, or fœtal limbs, or in short any evidences of pregnancy. Yet she tells us that the tumour began in the uterine region, and not in either groin, where the ovaries lie. But the bump of topography, as well as that of punctuality, is very slenderly developed in most women, so I shall lay but little stress on this statement of hers.

Let me now examine per vaginam the womb and its annexes. Were she pregnant, the cervix should feel as soft as my lips, but it is as hard as the tip of my nose—that is to say, its hardness means

an empty womb. By this examination and by the previous one, pregnancy can be so confidently excluded that I may next resort to the cautious use of the sound. It goes in readily enough and gives a measurement of high 2.75 inches. It shows that the womb lies behind the tumour, and also gives the important information that this organ moves freely and independently of the tumour. This means that the tumour is not continuous with the womb, nor closely attached to it.

But, since it is plainly not the pregnant womb, what kind of a cyst is it? Now I have not the time to enumerate all the kinds of cysts which may be found in the abdominal cavity. For this information you must consult your text-books. But after such an examination as I have given, one has the right to infer that this fluid tumour, being in no wise uterine, is the one most frequently met with—viz., an ovarian cyst. This diagnosis can be confirmed by an examination of the fluid or by the complete evacuation of the cyst. The microscope reveals a cell, the so-called ovarian cell, which although found elsewhere in the body, is said not to exist in large numbers in any cyst of the abdomen but the ovarian. Again in ascites, the fluid is usually straw-coloured and thin. In a cyst of the broad ligament it is as clear and limpid as spring-water. In a polycyst of the ovary the fluid is likely to be thick, dark, and turbid; while that of an oligocyst, which I suspect this to be, is thinner and generally of a lighter colour. Then again, by wholly removing the fluid, the cyst collapses more or less, and one can the more readily distinguish the various organs and therefore define the site of the tumour. But this slight operation of removing the fluid from the cyst, is by no means devoid of danger. Even when the smallest aspirator needle has been used, inflammation of the cyst may follow, which will compel the immediate resort to ovariectomy. Further, the fluid of a polycyst is always intensely acrid, sometimes so much so as to irritate even the hands of the operator, and the escape of a few drops into the cavity of the abdomen

may set up a violent and rapidly fatal peritonitis. For your guidance in such matters, I must therefore lay down some important rules for tapping. If you wish simply fluid enough for a microscopic examination, remove it by means of a hypodermic syringe. Should your motive be to gain time, or to relieve the pressure symptoms, or to cause such collapse of the cyst as shall aid in the diagnosis, empty the cyst *wholly*, so that no subsequent oozing may take place, and preferably by aspiration. The aim of these rules is, the avoidance of any escape of the fluid into the peritoneal cavity, and of the ingress of air into the cyst. A third rule is to perform ovariectomy and remove the cyst whenever inflammation sets in.

As my patient has come not to have ovariectomy performed, but simply to have her disease diagnosed and to be relieved of the bulk-symptoms, I shall wholly empty the cyst by this small aspirator-needle. This is not a very painful operation, and she has been etherized more to spare her feelings than her feeling. Since the bladder has been emptied it cannot be in the way, and that is a great comfort to know, so I shall boldly thrust this needle in the linea alba, midway between the navel and the symphysis pubis, that is to say, at a point where the structures are tendinous and most free from bloodvessels. The painful part of the operation being the penetration of the skin, choose the point where you intend to puncture and plunge in the trocar-needle rapidly, as I now do. Not long ago a medical friend, in a case of ovarian cyst which we saw together, taught me a little dodge about tapping worth knowing. He took an oblong lump of ice, wrapped a rag around one end by way of a handle, and dipped the other end into some table-salt. He then for a minute or two pressed this salted end firmly on the spot selected for the puncture. This off-hand freezing mixture so benumbed the skin, that, when I thrust in the trocar-needle, not only did the lady not wince, but she chatted and laughed throughout the operation as if nothing had happened.

The fluid is as you see somewhat syrupy

and of a brownish colour. It looks very like that of an ovarian cyst, but I shall defer giving a positive diagnosis until it has been examined by the microscope. By this tapping the woman will not be cured, but simply relieved. The fluid of an ovarian cyst is sure to return, except in some very rare cases of single cysts, which have been injected with iodine. And this stands to reason, for monocysts are quite rare, and it is impossible to make the trocar-needle enter every cyst of a polycyst. I am not using a tightening binder around the belly of this woman, for as she lies on her back and the fluid is being withdrawn very slowly, there will be no danger from syncope. There is at an off-hand guess about two buckets of fluid in this cyst, and as it will take some time to withdraw it, I shall utilize the remainder of my hour by talking to you about the operation of ovariectomy, and by giving you a few hints how to perform it at the home of your patient.

During this session I have twice performed this operation in this hospital, but as it was done in a private room, few of you had the opportunity of seeing it. My reason for not operating before you in this amphitheatre, much as I wished to, is that the woman's life being the first consideration, I deemed it hazardous to expose so vulnerable a membrane as the peritoneum to the cold draughts of this room, and to an atmosphere fouled by the breath of several hundred gentlemen fresh from fever wards and dissecting rooms. It would indeed be asking too much of Providence; but perhaps when the weather becomes warmer I may venture to perform it here under the carbolyzed spray.

Well! the first thing in an operation of this kind is to have plenty of medical assistants—one can't very well get along without four—and both the operator and his aids must be scrupulously clean and must not have seen any case of zymotic disease that day. The woman is to be prepared by a dose of oil taken early in the morning of the day preceding that of the operation. I don't stickle for oil against other cathartics, but, as an old practitioner once said to me, "It's a very searching remedy." That night she takes

a grain of opium, and another grain on the next morning. To avoid ether-vomiting her breakfast should be light. About eleven o'clock in the morning, she is to be laid on a kitchen table well covered with blankets, with her head raised on several pillows and her feet resting on a windsor chair without a back. When she is fully under ether, an incision about three inches in length is made in the median line below the umbilicus where the blood-vessels are few in number. But after cutting through skin and fat one can't always hit the linea alba. In the majority of cases the knife goes astray into the anterior sheath of one of the recti muscles, and does not keep in the central tendinous line. The red muscular fibres pouting out of the opening will be the danger signal of having got off the track into vascular regions. So stop cutting and pass in a probe across the muscle to the right and to the left, and the nearest point of arrest will note the linea alba. Again if you suppose that you can on a grooved director, cut canonically through the different layers of tissue described and engraved with so much precision in your text-books, you are much mistaken. When making this incision, all that you need to know is, when you are approaching the peritoneum. A landmark is therefore needed to warn one when to look out for it. My landmark is the thin layer of fat lying in the subperitoneal tissue. I therefore, cut down boldly through the skin and underlying fat, somewhat gingerly through the aponeurotic structures, until I reach this layer of fat which lies next to the peritoneum. Then I know that I am "getting warm"—as the boys say. So practically I regard but the following layers, skin with its subcutaneous fat, the intermediate tendinous or muscular structures, the extra-peritoneal fat, and peritoneum.

When you reach the peritoneum don't open it until all bleeding has been stopped, using either a soft napkin, or torsion, or the ligature when needed. Then hook it up by a delicate tenaculum, make a small opening, pass in a grooved director, and slit it up for a distance of from one to one-and-a-half inches. This is what is called

an exploratory incision, for by it the diagnosis is confirmed, the presence of adhesions ascertained, and the possibility of completing the operation determined. When you have decided to go on with the operation, more working room will be needed, and the peritoneal wound is then to be enlarged by scissors, using the finger as a guide to prevent injury to any chance bowel-loop that may be in the way. The size of the incision will depend upon the character of the cyst, and on the number of its adhesions. Hence it may range all the way from a length of three inches to the distance from ensiform cartilage to symphysis pubis. Adhesions binding the cyst to the abdominal wall are not of much importance. To lessen the risk of hemorrhage, they are to be sundered by the finger, whenever possible. Should the scissors be used, the band of adhesion must be snipped close to the surface of the cyst and not to that of the abdominal wall. Thus a free end is gained, which may if needful be subsequently ligated, or in which the dangling bloodvessels may the more readily constringe. If the delicate omental apron be found glued to the cyst, it should be carefully detached and turned out of the abdominal cavity on a clean napkin. If its bleeding vessels be few, each one may be tied or be twisted. But if they be many, the wounded portion of the omentum may be tied *en masse*, and the ligature cut off close to the knot. By this time you will be ready to tap the cyst, and that with a large sized siphon-trocar, so that the vent may be free and none of the acrid fluid may escape into the cavity of the abdomen. The empty cyst is next to be pulled out hand over hand through the abdominal wound. But should adhesions bind the cyst to the adjacent viscera, then matters won't go along so smoothly. Such adhesions to bladder, liver, bowels, or to other important organs present difficulties which are sometimes insurmountable. The problem here is to sever these bands of adhesion without injuring the viscera to which they are attached. Sometimes it will be needful to peel off the outer and non-secreting layers of the cyst and leave them behind.

From the sundered points of attachment more or less bleeding takes place which may prove very stubborn and embarrassing. This can usually be stopped by pressure with the sponge, or the finger, or with flannel cloths wrung out of hot water, or, as I have succeeded, at Dr. Kimball's suggestion, by temporarily stuffing a clean dry sheet into the abdominal cavity. Should these means prove unavailing, then fine carbolized silk or gut ligature may be needful, and it is astonishing how many may be applied without materially compromising the safety of the woman. The free ends are always to be cut off close to the knot.

When you have at last freed the cyst, and reached its stalk, a very important question comes up, one which has never been settled and bids fair never to be, viz., how shall the stalk be treated—shall you secure it outside of the wound by such a clamp as I show you? shall you burn it off with the actual cautery? shall you ligate it and bring the free ends of the ligature out at the lower angle of the wound? or shall you tie it and cut off the ligature close to the knot? Now I cannot possibly give you a treatise on ovariectomy within the brief compass of an hour, so I shall simply say that after a careful trial of all of these methods, and after a conscientious inquiry into the subject, I lean towards tying the stalk with fine carbolized silk, the finest compatible with safety, cutting the silk off at the knot and dropping the stump into the abdominal cavity. Now when I say silk, I mean silk, and not silver nor gut ligature. Silver being inelastic cannot bind a shrinking stalk; while the gut is a treacherous ligature and will sooner or later bring one to grief. It slips in the tying; it is liable to untie; it gives instead of shrinks, and it is too shortlived for the obliteration of large vessels. You might suppose that the distal end of the ligatured stalk would slough and expose the woman to septic absorption. But such sloughing rarely happens, and for the following reasons: The peritoneal surfaces on each side of the narrow and deep gutter made by the fine silk, will bulge over and span the gap. Adhesion then takes place between the

two, and the bloodvessels which shoot over from the proximal side of the ligature, will carry life into the distal end. Or lymph exuded by the irritation of the ligature will throw a living bridge across the gutter. Or, what is the least desirable, the raw end of the stalk glues itself to any peritoneal surface with which it may come in contact. I say *least desirable*, because sometimes such an adhesion constricts the calibre of an intestine, and gives trouble.

Shall we operate under the spray? shall we use drainage? are other important questions yet moot. On these points taken separately I am not yet prepared to give a final opinion, for my mind is not yet fully made up. But taken collectively I can say, that if you use the spray no drainage will be needed. If however, adhesions are many and you operate without antiseptic precautions, means of securing some form of drainage will be prudent.

Before closing the wound, return the omentum, and very gently spread it over the intestine. Bring the lips of the wound together by silver sutures passed in on each peritoneal surface about half an inch from the edge, and through the whole thickness of the abdominal wall. You can do this by one stout needle armed with a silk loop, over which the ends of each wire are successively hooked. The object of including the peritoneum is to bring in contact two long ribband-like surfaces of serous membrane which quickly unite. After the sutures are twisted, carry two or three broad strips of adhesive plaster around the whole body, and cover the wound by a pledget of lint dipped in carbolized oil. On this should be laid a roll of cotton-wool, and over all an elastic flannel binder, the rucking of which can be prevented by tapes pinned to it around each thigh.

Until all danger from vomiting is passed, the woman's diet should be very spare, not more than sips of milk or of beef-tea, then it may be cautiously increased. The dressing need not be renewed for three or four days, and the stitches not cut until a week has elapsed.

But to return to our patient, you see

that the cyst is nearly empty, and the belly quite flat. More fluid yet remains however, but as my hour has slipped by, I shall wheel her out and finish the operation in my private room. A small piece of plaster will be placed over the puncture—I have used a postage stamp at a pinch—an obstetric binder will be pinned around her belly, and she will be kept at rest until all danger from inflammation has passed.

HOSPITAL NOTES AND GLEANINGS.

Cases of Primary and Secondary Sclerosis of the Spinal Cord.—There are now a number of cases of disease of the spinal cord in the Hospital for Epilepsy and Paralysis, Regent's Park, under the care of Dr. ALTHAUS, in which the seat and extent of the lesion have been diagnosed with a considerable degree of certainty. In one of these cases the pathological change is strictly limited to the anterior cornua of the gray matter in the lumbar enlargement of the cord, as there is motor paralysis of the lower extremities, without any affection of sensibility, but accompanied with muscular atrophy which has set in rapidly, there being complete loss of faradic excitability of the muscles and nerves, and greatly diminished galvanic or voltaic excitability of the same. There is not the slightest affection of the bladder and rectum, and no tendency to bedsores, so that an affection of the posterior cornua and columns is excluded. The case is mending slowly under the influence of iodide of potassium, phosphorus, sulphur-baths, and galvanization of the cord. We will, however, to-day give the details of two cases only, one of which Dr. Althaus diagnosed as primary sclerosis of the external portion of the posterior columns, while the other was stated to be one of secondary sclerosis of the posterior or crossed pyramidal portion of the lateral column of the cord.

CASE 1.—Primary Sclerosis of the External Portion of the Posterior Columns.—J. R., forty, single, a commercial traveller, admitted January 25, 1878. He has travelled much in the tropics, undergone great exposure to cold and heat, and lived

altogether a wild life, exceeding in drinking and sexual relations. Five years ago he had an attack of delirium tremens. He also had some time ago a soft chancre and gonorrhœa, which resulted in stricture of the urethra, but never had constitutional syphilis. There is no hereditary neurotic tendency. Two years ago, when in South America, he first began to feel difficulty in walking, and was some time afterwards admitted into the hospital at Buenos Ayres, where he remained three months. He noticed that he walked much worse in the dark than in the daytime, and was obliged to look at his feet when walking in order to direct their movements. Six months ago he returned to this country; and two months before admission he was still able to go about, and could at a stretch walk three or four milles. One day, however, when about to cross a street, he had to make a sudden jump in order to avoid a cab running him over. This appeared to give him a strain in the back, and from that time he has gone down steadily.

Present State.—The brain is quite free from disease, but the third left cranial nerve or motor oculi is affected, there being paralysis of the rectus internus and the obliquus inferior muscles of the left eye. The patient is therefore unable to turn that eye upwards and inwards, thus showing divergent squint: there is crossed diplopia, and the lateral distance between the double images increases as the object is carried over to the right side. At first sight there appears also to be ptosis of the left eye, as the eye is habitually covered by the lid; but on closer examination it is found the levator palpebræ superioris is not paralyzed, but has been intentionally put out of action by the patient, so as to avoid the annoyance of the diplopia; and the eye can be opened at request without any difficulty. The ocular muscles of the right eye and all the other cranial nerves are quite healthy. Vision is perfect, and the ophthalmoscope does not reveal any textural changes in the eyes. The cord affection in this case is at present confined to the lumbar enlargement. The upper extremities and the thoracic and abdominal viscera are

quite healthy. Incomplete anæsthesia, however exists in the hypogastric region and the lower extremities, being more marked in the feet and legs than in the thighs and hips. On standing the patient feels the ground quite soft, like velvet or cotton; he is still able to feel the prick of a pin and touch of the fingers, but there is great numbness. Temperature and pressure are well perceived. The reflex action of the skin is normal, but tendinous reflexion is gone in the knees and feet. The power of walking is entirely gone, and the patient has great difficulty in getting up from a chair, nor can he stand except when supported on both sides; yet he can easily cross one leg over the other, and move the legs in all directions when sitting or lying down. There is malnutrition of the muscles of the lower extremities, which have become flabby and thin by disuse; yet they respond quite well to both the faradic and voltaic current, showing that there is the proper relation between them and the anterior cornua of the cord. The patient has no difficulty in passing and retaining his water; the bowels are habitually regular, and the sphincter ani acts properly. The sexual power is diminished, but not gone; for the patient has erections on waking in the morning, and occasionally emissions in his sleep. Seeing that there is functional energy of the bladder, rectum, and sexual organs, it appears evident that the disease has not spread to the posterior cornua of the gray matter, but is confined to the external portion of the white posterior columns, which Charcot and Pierret have shown to be the first seat of the lesion in progressive locomotor ataxy.

The patient has been treated with nitrate of silver for three months, and afterwards with the liquid extract of ergot and phosphorus also for three months. There has been very little change in his condition; the disease appears to have become arrested. No fresh symptoms have appeared, and the only improvement has been that the patient is able to get up from a chair more easily. Dr. Althaus has now prescribed the liquid extract of damiana, which he believes to possess a

special action on the spinal cord, similar to that of ergot.

CASE 2.—*Secondary Sclerosis of the Posterior or Crossed Pyramidal Portion of the Left Lateral Column of the Cord.*—C. B., aged forty, married, a fish salesman, was admitted under the care of Dr. Althaus on January 31, 1878. Seven years ago, while attending to his business, he had an attack, in which he to some extent lost his speech and the use of the left side. He could speak, but thickly and with an effort, and could walk a little, but kept falling down as he went on. He was taken into the London Hospital, but was unable to return to his business when he left it. Twelve months after the first attack he had another, which was more severe than the first, the paralysis being for a time more complete. He attributed his illness to anxiety and excitement in business, having had heavy losses just previous to the first attack. His parents were both extremely nervous people, and had died early; and he had for some time previous to the first attack suffered from headache and indigestion.

On examination it was found that his speech was somewhat thick and indistinct, but fluent, there being no loss of words. The patient's manner is peculiar, somewhat silly. His memory is impaired. The cranial nerves are quite healthy. There is loss of power and rigidity in the left side of the body. The arm appears abducted from the side, and the elbow, wrist, and fingers are held in a state of extension. There is great difficulty in flexing and supinating the arm, and in bending the hand and fingers; and considerable resistance to passive movements in that direction is experienced. The patient's gait is most peculiar, and closely resembles that kind of walk which is found in spastic spinal paralysis. He walks on tiptoe with the left leg, which seems to be fixed as in a vice, so clumsy are its movements. The foot is inclined to scrape the ground, and there is tendency to fall forwards on that side of the body. The rigidity is chiefly marked in the rectus femoris, and there is difficulty in flexing the leg and foot. The reflex action of the skin is slightly increased,

and that of the tendons, more particularly in the triceps of the arm and the rectus femoris, is considerably increased, which constitutes another point of resemblance with spastic spinal paralysis. There is slight wasting of the muscles, but not more than could be attributed to disuse; and the faradic and galvanic response is slightly less than on the healthy side. Sensation is not affected, and the thoracic and abdominal viscera are quite healthy.

Dr. Althaus gave the following account of the pathology of the case: There was at first hemorrhage in the right corpus striatum, owing to a rupture of one or several miliary aneurisms of the arterioles of the Sylvian artery, causing left hemiplegia. There was never any true aphasia, but only such impairment of speech as is met with independently of disease in Broca's convolution. In consequence of the hemorrhage, secondary sclerosis, such as first described by Türck of Vienna, set in in the posterior portion of the lateral column of the cord. This portion, which is now called Flechsig's crossed pyramidal column, is situated more posteriorly than the lateral column proper, and is composed entirely of fibres derived from the opposite cerebral hemisphere. This same portion of the lateral column is also the seat of that disease which has lately been described as spastic spinal paralysis (Erb), spasmodic tabes dorsalis (Charcot), and primary lateral sclerosis (Berger). There is thus no difficulty in explaining the physiological similarity in the symptoms observed in this case, which, except for its history, might be classed as one of spastic spinal paralysis. The cause and commencement of the two maladies are, however, quite different, the one being primary and the other secondary sclerosis. Moreover, the gray patches which would be found in the cord of the present patient, should his case terminate fatally, would be seen not to be wedge-shaped, as in primary sclerosis, but more rounded; and they would be seen to spread exteriorly, not as far as the pia mater, which they do in primary sclerosis, but would stop short at some distance from that membrane. The patient is treated with a mixture of iodide

of potassium and citrate of iron and quinine, and systematic gymnastic exercises, under which he is improving considerably.—*Med. Times and Gaz.*, Aug. 3, 1878.

Resection of Knee-Joint; Recovery, with Useful Limb.—Susan H—, aged twenty-six years, housemaid, was admitted on Sept. 24, 1877, into Mr. West's ward in Queen's Hospital, Birmingham. The family history was good, except that the father died "consumptive."

In the month of May, 1874, she first noticed two lumps, one upon either side of the right knee. These did not disappear, and in a short time the whole knee-joint became swollen. She experienced pain in the part, especially upon exertion, and was compelled to take rest at intervals during the next three years. About three months before admission another swelling formed at the back of the joint. This she said, "gathered up and broke in about eight weeks, and discharged a large quantity of matter." No bone had ever come away. The patient could not give any history of injury, but she had had a great amount of kneeling. She had had no previous illnesses.

On admission the right knee was generally enlarged, and was slightly flexed. At the outer and back part of the head of the tibia there was the opening of a sinus, which passed downwards and forwards for about three inches. The patella was slightly movable, but there was no fluctuation across the joint. The lower end of the femur was slightly expanded, and the head of the tibia much more so. There was no redness of skin nor enlargement of the superficial vessels. There was great tenderness upon pressure. She was able slightly to flex the knee. The following measurements were taken:—

	Right limb.	Left limb.
Over the centre of the patella,	14½ in.	13 in.
2 in. above " "	13 in.	12½ in.
2 in. below " "	13½ in.	11 in.

A probe was inserted into the sinus, and, a counter-opening having been made, a drainage-tube was inserted, and a weight and pulley apparatus was applied. Temperature 108.7° F.

She continued to get worse during the month of October. The joint became more swollen; there was distinct fluctuation in the joint. The temperature continued high, with morning intermissions, being seldom less than 100° , and often rising to 103° . The appetite failed, and emaciation was becoming very marked. The pain increased, and became so great at night that it prevented sleep, and disorganization of the joint had evidently set in.

On Nov. 3d the joint was opened. A single straight incision was made across the joint, just below the patella, and a slice, half an inch thick, was sawn from the head of the tibia. As, however, the cancellated structure of that bone was very soft and carious, the gouge was freely used, so that a cavity was made in it large enough to contain a hen's egg. A small thin slice was then taken from the eroded articular surface of the femur, but the patella was left *in situ* after its surface had been slightly gouged. The operation was performed under Lister's antiseptic method, and the limb was put up in gutta-percha with Nathan Smith's splint before the patient was removed from the operating table.

The wound was dressed daily after the operation. The temperature remained high, especially at night, averaging about 102° F. during the first week. The sutures were removed on Nov. 7th, when the wound was found to be entirely united. The discharge was a bland yellow serum, without offensive odour.

Steady improvement in the patient's condition ensued, the pulse increasing in strength, and the temperature falling daily.

On Nov. 19th a plaster-of-paris case was applied from the toes to the pelvis to fix the limb immovably.

On Dec. 1st a small abscess, which had formed over the head of the tibia, was opened, and after that the limb was dressed antiseptically every second or third day.

During January the wound firmly healed with the exception of a small sinus at the outer angle, which did not, however, appear to lead to carious bone.

Pain entirely ceased, appetite returned, the temperature fell to normal, and by the end of the month, when the plaster case was removed in order that a fresh one might be applied, the woman was able to lift the limb without assistance. On Feb. 4th she was discharged cured. She was able to walk about with a crutch, there being not more than one inch of shortening, the patella was slightly movable, and the front of the joint looked broad, firm, and strong. She had increased considerably in weight since the operation, and had taken no medicine except a little quinine and an occasional opiate, but throughout she had had a generous diet and four ounces of port wine daily.

Remarks by Mr. West.—The above case illustrates the good result of antiseptic treatment of resection of the knee-joint, the advantage resulting from a very moderate division of the soft parts, a single straight transverse incision giving ample room for the use of Butcher's saw in making sections of both the tibia and femur, and the increased strength and solidity given to the limb by the retention of the patella, and by constant immobilization of the parts by means of a plaster-of-paris apparatus.

There are several interesting features in this case. The joint disease had clearly resulted from inflammation of the head of the tibia, leading to caries, which had existed for a long time before she came under my care. All kinds of counter-irritants, combined with immobilization, had been resorted to without success. The whole of the structures of the joint were involved, but the greatest mischief was in the cancellous tissue of the head of the tibia. The patient's strength was exhausted, and hectic fever was quickly bearing her to the grave. This was obviously not a case for palliative or expectant treatment; the question that arose was, Had the poor girl sufficient stamina to go through the protracted convalescence which must necessarily attend resection of the knee-joint, or was it right, with a view of saving her life, which in November was in great danger, to resort to amputation of the thigh?

Having myself great faith in resection, especially in young subjects, and being extremely averse to amputate for almost any kind of joint mischief, without first making trial of resection of the affected joint, I determined to try what I could do for her by resection of the knee.

When I opened the joint, and discovered how largely the caries of the tibia had extended, I feared that I had made a mistake in endeavouring to save the limb, and that so much of it would have to be taken away that, if the patient did recover, which seemed somewhat improbable, it would be with a shortened and comparatively useless limb. Having, however, determined on resection of the joint, I carried it out, but having to remove so much of the tibia, I took away as little as possible of the femur, and I left, as I always do where practicable, the patella, to help to strengthen the front of the resected parts.—*Lancet*, July 20, 1878.

MEDICAL NEWS.

DOMESTIC INTELLIGENCE.

Yellow Fever and its Prevention.—Under the National Quarantine Act the medical officers of the United States Marine Hospital Service are required to assist the civil health authorities in all proper and practicable ways when requested to do so; and in view of this fact, and the prevalence of yellow fever in several of the inland cities of the United States, it has seemed proper to Surgeon-General Woodworth that he should make known to the medical officers of the Marine Hospital Service his individual views in reference to the disease and its prevention, which are not, however, to be regarded as having official force. They are as follows:—

“The weight of scientific evidence seems to warrant the conclusion that yellow fever is produced by an invisible poison capable of self-multiplication outside of the human organism, which it enters through the air-passages. The poison-germ or miasma is a product of the tropics. In this country, yellow fever has prevailed in most of the Gulf

and Atlantic cities, and in many of the towns along the Mississippi River. In some instances it has been carried inland with the people fleeing from infected localities, but it has never shown a disposition to spread epidemically at points remote from the continuous water-roads of commerce, or to lodge in high salubrious places. The cities of the Great Lakes have always been free from the disease. Yellow fever cannot be said to be endemic in the United States, from the fact that in some years it does not appear, though the imported germ undoubtedly survives the mild winters. It appears to have about as much resistance of cold as the banana plant. When the banana stalk is killed down by the frost, the yellow fever does not recur until again imported. The germ is transmissible. It is capable of being transported in the clothing or personal effects of passengers and sailors, but its spread from one city to another is chiefly accomplished by vessels—their damp, filthy holds and bilge-water being its favorite lurking-places. Confinement, moisture, and high temperature favor the multiplication or virulence of the poison. When a wharf, or spot of ground, or a house, becomes infected, the poison at once commences to spread, creeping slowly in all possible directions, continually enlarging the area around the centre of infection, unless checked by disinfection, as has undoubtedly been done by the use of carbolic acid in New Orleans in former outbreaks. Yellow fever is not communicated from the sick to the well; the sick and well being dangerous only as possible carriers of the poison-germ or miasm. In support of this assertion it may be stated that at quarantine hospitals, where the effects of yellow fever patients are burned, or otherwise thoroughly disinfected before the admission of the patients, the attendants do not contract the disease. This has been demonstrated many times. All well persons whose effects have been disinfected may be considered harmless after six or seven days have elapsed from the time of leaving an infected district or vessel, as the period of incubation of the disease lasts from two to six days. This simpli-

ties the question of quarantine—absolute land-quarantines being deemed impracticable—and indicates the direction of preventive measures to the vessel, cargo, or the locality, if the poison have found lodgment on shore. A vessel may escape infection if kept clean and dry, and all parts capable of being closed are frequently subjected to the fumes of burning sulphur, and the men employed on board are compelled to bathe and change their flannels daily, and not allowed to sleep on deck or in the hold of the vessel. There is an example of a ship trading between Havana and New York, upon which these precautions have been enforced for a period of twelve years, and not a single case of yellow fever has occurred on board. Though not sufficiently demonstrated to state as a fact, still there seems good reason to believe that much may be accomplished by individual prophylaxis:—by the use internally of small doses of sulphate of quinia at regular intervals, and of tincture of iron and chlorate of potassa. As the poison enters the system through the air-passages it has been suggested that the nasal passages be bathed frequently with a solution containing quinia, to be applied by means of a nasal spray."

The Progress of the Yellow Fever Epidemic.—From the official report of the Surgeon-General of the United States Marine Hospital Service for the week ending August 24th, we learn that at New Orleans during the week ending at noon on August 23d, there were seven hundred and seventy-one cases of yellow fever and two hundred and ninety-five deaths—making in all sixteen hundred and seventy-three cases and five hundred and thirty-four deaths. During the twenty-four hours to noon, Aug. 23d, there were one hundred and twenty-three new cases and forty deaths.

At Vicksburg there were at least four hundred cases of yellow fever from date of commencement, Aug. 12th, to evening of 23d, and sixty-nine deaths. Aug. 23, there were twenty deaths.

At Memphis there were one hundred and forty-four cases of yellow fever and

fifty-three deaths during six days to Aug. 23d.

At Canton, Miss., the first case of yellow fever occurred on Aug. 1st. To Aug. 23d there were eighteen cases and eight deaths.

The first case of yellow fever originating in Port Gibson, Miss., occurred Aug. 3d, resulting in death, Aug. 8th. The disease began to spread Aug. 14th. One hundred and eighteen cases and nine deaths to Aug. 23d.

To Aug. 23d no more cases of yellow fever had developed at Cincinnati since the two mentioned in the preceding weekly report. The engineer of the steamer "Golden Rule" was admitted to the hospital on the 22d instant with yellow fever, and also one other case, probable yellow fever, from Memphis.

At Morgan City, La., there was one case of yellow fever, Aug. 21, a patient from New Orleans.

At Ocean Springs, Miss, there are reported three cases of yellow fever and one death—all imported.

Four refugees died of yellow fever at St. Louis during the week ending Aug. 23d.

At Louisville four river-boatmen suffering from yellow fever are under treatment.

Dispatches to the 23d instant report good health at Mobile.

From Key West we learn that no yellow fever has appeared for three weeks to yesterday evening.

At Grenada, Miss., so many of the remaining population are stricken with the fever that definite information of the number of cases and deaths cannot be obtained.

At Havana ninety deaths from yellow fever and six from smallpox are reported for the week ending Aug. 17th.

At Matanzas the cases of yellow fever have decreased. Only five American vessels in port Aug. 16th, and all of them have either had, or were having, cases of yellow fever on board.

American Ophthalmological Society.—The annual meeting of this society was held at Newport in July last. The following

officers were elected for the ensuing year: President, H. D. Noyes, M.D., of New York; Vice-President, Wm. F. Norris, M.D., of Philadelphia; Secretary, R. H. Derby, M.D., of New York.

American Otological Society.—The annual meeting of this society was held at Newport, on July 24th, and the following officers were elected for the ensuing year: President, Albert H. Buck, M.D., of New York; Vice-President, Dr. Chas. H. Burnett, of Philadelphia; Secretary, Dr. J. Orne Green, of Boston.

Oregon State Medical Society.—The fifth annual meeting of this Society was held at Portland, June 18th, when the following officers were elected for the ensuing year:—President, H. Carpenter, M.D., of Salem; Vice-President, Dr. F. A. Bailey, of Hillsboro; Secretary, Dr. Curtis C. Strong, of Portland.

Medical Degrees for Dental Students.—Arrangements have been made with the Jefferson Medical College whereby students of the Philadelphia Dental College and of the Pennsylvania Dental College may obtain the two degrees of D.D.S. and M.D. in three years. Dental students taking the degree of M.D. will be required during the second year to pursue extra studies in surgery, practice of medicine, and obstetrics, and the third year will be entirely devoted to medical studies.

FOREIGN INTELLIGENCE.

Catgut Ligatures.—Dr. J. C. OGILVIE WILL, Surgeon to the Aberdeen Royal Infirmary, makes the following report (*Lancet*, July 20, 1878) concerning some experiments on catgut steeped in chromic acid:—

During the last few months I have conducted a number of experiments with catgut steeped in solutions of chromic acid of varying strength, the material being kept in the solutions for a given number of hours with a view to obtain a substance which, while capable of being absorbed, might be relied on as possessing sufficient endurance, if I may so put

it, to last until its use could be dispensed with; but this I have as yet failed to obtain, the weakest solution of chromic acid seeming to so tan the catgut that its solution and absorption is rendered impossible. Still chromic-acid catgut sutures, similar to those used in the foregoing case, are of great value in a very large class of cases, and may be regarded as perfectly reliable substitutes for silk or wire, as, with the single exception of absorbability, they will be found to meet all the requirements of this mode of keeping cut parts in apposition. For chromic-acid catgut possesses the advantage of a maximum degree of strength combined with a minimum of size, and it is absolutely non-irritating. I have now used it in a great variety of cases, from major amputations to minute excisions, and in no case have I had reason to regret its employment. I do not mean it to be understood that in every case it has held the parts together until union has resulted, but that it has proved lasting and non-irritating in all; for example, in a case of amputation of the thigh, where union did not take place by first intention, the sutures soon became detached from the edges of the posterior flap, but some of them were allowed to remain attached to the edges of the tissues forming the anterior flap, without occasioning the slightest degree of inflammatory irritation. The mode of preparation I have hitherto found most reliable is this: I take a few yards of thin, common, unprepared, dry catgut, and place it in a wide-mouthed phial containing glycerine and carbolic acid (one part of acid to seven of glycerine), and, after steeping for a week or longer, the catgut is transferred to a vessel containing chromic acid, acetic acid, and water (one per cent. of chromic, and twenty-five per cent. of acid). At the end of seven hours the catgut is taken out and dried. During the drying process it is prevented from curling up, or getting rough and uneven, by using tension, the gut being stretched by winding it round two nails driven into a piece of wood, a foot or two distant from each other. In the course of a few hours it will be found ready for use.

Catgut, thus prepared, is a brownish-black, perfectly smooth material, possessing great strength, yet not much thicker than what is sold in bottles as "fine" antiseptic catgut ligature. The mode of preparing tanned catgut may possibly be already well known; but, as I have not yet seen any description of it,¹ it occurred to me that a detailed notice of it might prove useful to those seeking for a reliable substitute for the materials commonly employed for sutures.

Thrombosis of the Veins in its Surgical Relations.—Dr. AZAM, of Bordeaux, terminates a paper (*Gaz. Heb.*, July 19), read at the Société de Chirurgie with these conclusions: 1. Thrombosis is possible after fractures, contusions, phlebitis, varices, chronic inflammations in the vicinity of large vessels, accouchements, and through compression exerted on the veins by neighbouring tumours undergoing rapid development. 2. Thrombosis suspected by reason of the œdema of parts situated below is ascertained by direct exploration along the tracts of the efferent veins. 3. The detachment of migratory coagula may be induced by an exaggerated exploration of the veins, by massage of the affected limbs, or by the sudden removal of the compression of a thrombosed vein. 4. The accidents producible by migratory coagula are variable according to the dimensions of these. They may consist in mere uneasiness, pleurisy with limited effusion, partial pneumonia, hæmoptysis, syncope, asphyxia, or sudden death. 5. The surgeon may prevent the formation of venous coagula in avoiding as far as possible the slow compression of large veins, in respecting with the greatest care their inner coat, and in hastening the cure of chronic or deep-seated inflammations situated near veins. 6. When thrombosis is confirmed, he should endeavour to prevent the detachment of coagula by imped-

ing local and general motion, and discharging all collections of liquid near veins so affected.—*Med. Times and Gaz.*, July 27, 1878.

Epidermic Grafting in Coloured Races.—At the Société de Biologie (*Gaz. Heb.* July 5), M. MAUREL stated that during a two years' residence at Guiana he had made numerous experiments on epidermic transplantation, placing the grafts on persons of different race and colour. He found that not only did the graft take well, whatever description of transplantation was made—whether transported from the skin of a black to that of a white, or the reverse—but that there always remained a whitish line at the point of junction, wherein pigmentation was not produced. The pigment disappeared when a graft was transplanted from a black to a white person; but when the two individuals were highly coloured, the graft remained black except at the point of cicatrization.—*Med. Times and Gaz.*, July 13, 1878.

The Brain in Atrophy of the Arm.—M. MARC SÉE has presented to the Société de Chirurgie the brain from the body of a man brought into a dissecting room, of which the right arm was atrophied as if from infantile paralysis. A marked difference in size existed between the right and left ascending parietal convolutions; the former being of normal size, and the latter considerably smaller. M. SÉE asks whether this is a mere coincidence or not, and does not venture to give an answer in the face of the contradictory opinions of MM. Charcot and Luys on the subject. The case is, however, of much interest on account of its coincidence with that recently brought by Dr. Gowers before the Medical and Surgical Society, in which an atrophy of the middle third of the same convolution co-existed with a congenital absence of the hand on the opposite side.—*Lancet*, June 8, 1878.

Pulverized Sea-Water.—Prof. MANTEGAZZA states (*Gaz. Med. Lombard.*, March 30) that he has derived great advantage

¹ Some interesting facts concerning the preparation of catgut ligatures, brought before the International Medical Congress held at Philadelphia in 1876 by Professor Lister, and the composition of the fluid he employs for the purpose, may be found in the Transactions of the Congress, p. 538.

from the employment of pulverized sea-water in cases of chronic non-specific laryngitis, obstinate chronic pharyngitis, bronchial catarrh from chronic bronchitis with or without bronchial dilatation, the first and second stages of phthisis, caseous pneumonia, and chronic pneumonia of different forms accompanied by profuse bronchial expectoration, and various forms of scrofula. He does not advise it in those forms of phthisis which pursue a rapid course and are accompanied by much febrile action and great bronchial irritation. In all doubtful cases trials may be made of a few inhalations, which, if they do no good, do little or no harm. Pulverizations of sea-water are now executed at several establishments in Italy, but prominent among these is that of Rimini, where they are conducted on so large a scale that twenty persons may receive them at the same time, the pulverization being effected by means of compressed air and a steam-engine. The *sedute* lasts for half an hour at first, and afterwards for an hour, from thirty to forty of these being required. The patients while respiring the vapour should be encouraged to talk and sing as far as their strength allows. The first effects produced are a pleasant excitement and a return of appetite.—*Med. Times and Gaz.*, May 18, 1878.

—
Metallo-Therapeutics.—There is no abatement abroad of interest in the subject of "metallo-therapeutics," and enthusiastic scientists are continually taking up the matter and producing wonderful results, which, it must be confessed, do not seem to be the clumsy conjuring that some think them. Whatever opinion may be held as to the meaning of these effects of metallic applications, it is of prime importance to note that their study is not undertaken by clever charlatans, but by men of known powers of observation. One of the most recent accounts of the effects of metallic therapeutics is that of M. Abadie in a short paper on Hysterical Amblyopia (*Prog. Méd.*, July 13th). He points out that many cases of so-called "congenital amblyopia," when vision is not wholly abolished, when the failure is

chiefly in the centre of the field, and when the duration of the amblyopia may be almost indefinite, depend on anomalies of refraction, others on congenital defect in the optic nerve, whilst others are probably more strictly of the hysterical type. He further points out that hysterical amblyopia is not always associated with prominent hemianæsthesia nor with the pronounced symptoms of grave hysteria, but is often almost the only functional derangement present. Three cases of so-called congenital amblyopia which he had recently seen proved to belong to the hysterical category; they were associated with some hemianæsthesia, the loss of sensibility being limited to the side of the amblyopia (which is almost invariably unilateral). Application of gold to the temporal region of the amblyopic side not only increased the acuteness of vision, but was accompanied by a diminution in that of the unaffected eye. A similar transference of sensation was observed with regard to the cutaneous sensibility. It is a phenomenon first pointed out by Charcot, and is one of the most remarkable facts in the observations of these cases.

Besides unilateral amblyopia with hemianæsthesia there are other ocular nerve disorders traceable to hysteria, and, according to M. Abadie, amenable also to metallic applications. The frequent complaint of women that they cannot look at any object for any time without suffering severe pain in the head, and photophobia, and the constant burning and pricking sensation experienced in the conjunctiva and eyelids without any change being noted in the fundus and without any anomaly of refraction, belong to a class of functional visual derangements, which has been variously said to depend on asthenopia of accommodation or upon retinal hyperæsthesia. Förster, of Breslau, has recently studied these cases, and styles them hysterical kopiopia, and shows that they are usually associated with some slight uterine disorder. In such cases menstruation is deranged, abdominal pains are complained of; but the chief trouble is that produced by reflex phenomena, which far outweigh the local

disturbing cause in their effect on the patient. Many young women are wholly unable to read, write, or sew in consequence of the troublesome functional derangement of their visual organs. The treatment for these cases of "uterine kopiopia" consists in measures for the uterine affection itself, hydrotherapy and bromide of potassium, and in some cases "metallo-therapy." M. Abadie has found that in cases of this class which are truly hysterical the effect of metallic applications is very striking. Thus there are cases in which continuous headache, neuralgia increased by the least work, and not yielding to quinine, have been cured by the simple means of application of a metal. Gold is the first metal to be tried. "Three twenty-franc pieces" are tied on to the forehead, and kept there during the night. If relief comes with the morning, then the metal is administered internally in the form of the chloride, at a dose of about a centigramme. Should gold fail, then copper, zinc, or combinations of metals are tried until eventually a cure is effected. An illustrative case is given, and with an abstract of this we may leave, for the present, the subject of metallic medicine. The patient was a young lady, twenty-five years of age, who for nearly a year had suffered from asthenopia, inability to view near objects without severe pains in the head, photophobia, and transitory oedema of eyelids in the morning. The eyes were perfectly normal in every respect. Tonics, baths, and bromide of potassium produced no effect, and at the end of two months M. Abadie saw the patient again. He then learnt that she suffered from abdominal pain at the catamenial periods, when also the ocular disorder was most marked. There was no anæsthesia nor amblyopia, yet he thought it well, after the failure of other remedies, to have recourse to the metallic treatment. He applied gold externally and administered it internally. The latter mode of exhibition provoked gastric disorder, and, no relief ensuing at the end of a month, copper was had recourse to. The day following the application of

copper the photophobia had disappeared and the oedema of the eyelids did not develop, and the patient thought herself so well at the end of a month as not to require any more of the treatment. It was left off, and the symptoms returned. She herself had recourse to the cupric treatment, but this time no good resulted. Finally, M. Abadie effected a rapid and complete cure by applying a combination of copper and zinc externally in the form of two thin plates of these metals.

It is evident that metallic medicine is not yet a thing of the past, for the same number of the journal containing this communication states also that MM. Charcot and Regnard contributed to the *Société de Biologie* a paper on the subject with reference to hysterical hemianæsthesia; and the journal itself promises to discuss the matter again shortly. Whatever the explanation, the subject is not one to be passed over in silence.—*Lancet*, July 20, 1878.

—
Canada Medical Association.—The eleventh annual meeting of the Canada Medical Association will be held in the city of Hamilton, Ontario, on Wednesday, 11th of September.

—
OBITUARY RECORD.—Professor BARTELS, of Kiel, a distinguished physician, died in the latter part of June. He made an especial study of renal diseases, and in England he will probably be best known by the volume on the Kidney in Ziemssen's "Cyclopædia of Medicine," and by an excellent lecture on the Diffuse Inflammations of the Kidneys in Volkmann's *Sammlung klinischer Vorträge*.—*Med. Times and Gaz.*, Aug. 3, 1878.

— At Vienna, on the 23d of July, aged 74, KARL ROKITANSKY, Curator of the Imperial Pathological Museum, and late Professor of the University of Vienna. Rokitansky's reputation as a pathologist is world-wide, and his great work on Pathological Anatomy, which was completed in 1846, is still a standard authority in all matters relating to gross lesions.

BARNES ON DISEASES OF WOMEN—New Edition—Just Ready.

A CLINICAL EXPOSITION OF THE MEDICAL AND SURGICAL DISEASES OF WOMEN.

By **ROBERT BARNES, M.D., F.R.C.P.,**
Obstetric Physician to St. Thomas's Hospital, etc.

Second American, from the Second and Revised English Edition.

In one handsome octavo volume of 784 pp., with 180 illustrations: cloth, \$4 50; leather, \$5 50.

The call for a new edition of Dr. Barnes' work on the Diseases of Females has encouraged the author to make it even more worthy of the favor of the profession than before. By a rearrangement and careful pruning, space has been found for a new chapter on the Gynecological Relations of the Bladder and Bowel Disorders, without increasing the size of the book, while many new illustrations have been introduced where experience has shown them to be needed. It is therefore hoped that the volume will be found to reflect thoroughly and accurately the present condition of gynecological science.

CLASSEN'S QUANTITATIVE ANALYSIS—Just Ready.

ELEMENTARY AND QUANTITATIVE ANALYSIS. By **ALEXANDER CLASSEN**, Professor in the Royal Polytechnic School, Aix-la-Chapelle. Translated, with Notes and Additions, by **EDGAR F. SMITH, Ph.D.**, Assistant Prof. of Chemistry in the Towne Scientific School, Univ. of Pa. In one handsome royal 12mo. volume of 324 pages, with illustrations; cloth, \$2.

This little book will supply a want of a condensed and convenient laboratory guide for the student in quantitative analysis. Since its appearance in Germany, two or three years since, it has been received throughout the continent as a recognized authority, and its translation into French and Russian shows that the author has succeeded in thoroughly fulfilling the object at which he aimed. The translator has added such processes and details as seemed requisite to adapt the volume more thoroughly to the wants of the American student.

FOTHERGILL'S ANTAGONISM OF THERAPEUTIC AGENTS—Just Ready.

THE ANTAGONISM OF THERAPEUTIC AGENTS AND WHAT IT TEACHES. Being the Fothergillian Prize Essay for 1878. By **J. MILNER FOTHERGILL, M.D.** Edin.; **M.R.C.P. Lond.**; Asst. Phys. to the West Lond. Hosp.; Asst. Phys. to the City of Lond. Hosp., etc. In one neat royal 12mo. vol. of 156 pages; cloth, \$1.

It would seem unnecessary to call the attention of the profession to a work on so suggestive a subject by a writer so brilliant as Dr. Fothergill. There is, perhaps, no one who has a better claim to be heard, and no topic more worthy the study and reflection of the practitioner.

LA ROCHE ON YELLOW FEVER.

YELLOW FEVER; considered in its Historical, Pathological, Etiological, and Therapeutical Relations. Including a sketch of the disease as it has occurred in Philadelphia from 1699 to 1854, with an examination of the connections between it and the Fevers known under the same name in other parts of temperate as well as in tropical regions. By **R. LA ROCHE, M.D.**, Fellow of the College of Physicians, Phila.; Foreign Associate of the Academies of Turin, Copenhagen, Stockholm, Nancy, New Orleans, etc. In two very large and handsome octavo volumes of nearly fifteen hundred pages: cloth, \$7.

We have not time at present, engaged as we are, by day and by night, in the work of combating this very disease, now prevailing in our city, to do more than give this cursory notice of what we consider as undoubtedly the most able and erudite medical publication our country has yet produced. But in view of the startling fact that this, the most malignant and unmanageable disease of modern times, has for several years been prevailing in our country to a greater extent than ever before; that it is no longer confined to either large or small cities, but penetrates country villages, plantations, and farmhouses; that it is treated with scarcely better success now than thirty or forty years ago; that there is vast mischief done by ignorant pretenders to knowledge in regard to the disease, and in view of the probability that a majority of southern phy-

sicians will be called upon to treat the disease, we trust that this able and comprehensive treatise will be very generally read in the south.—*Memphis Med. Recorder.*

This is decidedly the great American medical work of the day—a full, complete, and systematic treatise, unequalled by any other upon the all-important subject of Yellow Fever. The laborious, indefatigable, and learned author has devoted to it many years of arduous research and careful study; and the result is such as will reflect the highest honor upon the author and our country.—*Southern Med and Surg. Journal.*

A miracle of industry and research, constituting a complete library of reference on the disease of which it treats.—*Dublin Quarterly Journal.*

HENRY C. LEA, Philadelphia.